

Comments of Cliff Davis

I am a retired Engineer and programmer

I have reviewed many of the comments here and have some of my own. This NPRM marks an historic point in radio regulation. The FCC has a chance to do in one movement what it has failed to do over decades. That is, provide real improvement to AM radio. From the dozens of positive comments without even one dissenting view of any merit, the broadcasters and community voices have spoken loud and clear. It is time to give LOCAL AM radio the boost it really needs. Comment after comment speaks of how local stand alone stations many owned by families or actual Mom and Pop operations have been doing the best they can to provide service in an environment with increasing noise and skywave interference. This is made even worse by the new batch of IBOC hash that is now on the air. These stations are in dire need and many are on the brink of going under. While it is not the job of the government to prop these stations up, the government must realize the problems that will result if thousands of AM stations go dark and so many areas lose their primary LOCAL radio service. The ripple effect will not be good for the public, the economy or public safety.

I dare say the NPRM at hand is as important as the advent of color television. My only regret here is that most of the commissioners now appointed have very little real background in broadcasting. They deal more with spectrum auction issues and granting new service such as satellite operations and responding to large operations like Ibiquity.

I doubt that many of the Commissioners know anything about or have ever visited a small town AM radio station to see just how it is done. Chairman Martin himself is a rather young chap who probably never listened to AM as he was growing up. To him AM is probably something he heard about but never listened to.

But the fact that the Commission did in fact treat the NAB proposal seriously and came up with this NPRM is very very encouraging.

The main premise of allowing AM over Fm translators should be a very simple matter of rewriting a few regulations. The big issue comes in how to get small AM stations on that do not already have access to translators that may already be on air. The fact that the issue is being acknowledged and debated is very positive.

As an engineer I never understood why the source of the modulation made any real difference. Since many stations use translators that are hundreds of

miles away and the signal is fed over satellite, why in the current atmosphere is it of concern whether the originating station is AM or FM? The true spirit of translators was lost years ago when the FCC allowed distant stations to operate far far outside their service areas over translators. We must keep in mind that translators were originally supposed to fill in coverage or extend coverage beyond simple natural or manmade barriers. That is why AM was originally excluded as the AM ground wave did not normally get blocked as an FM signal would and back in 1970 when translators were first allowed the average FM radio had a poor front end and was not very sensitive. Today many FM radios can deliver good audio with signal levels as low as 39 dbu, a far cry from decades ago with anything less than 54 dbu was full of noise! The truth is that many translators used by FM stations are obsolete due to improved FM radio construction and design.

The commission has the chance to change some backward rulings of the past and make a giant step into the future. But this will take some bold action.

First the FCC must follow thru on rumors that it will kill the thousands of translator applications now pending that have been brought by the two or three filers that overwhelmed the commission with applications for almost every available spot in the nation. Then the Commission must give serious consideration to expanding the FM band to allow more spectrum for translators that will in fact become de-facto PRIMARY service in areas where the parent AM was the only local service.

Since most U.S. built FM radios will tune to as low as 87.7, some consideration should be made at this time for expansion of the FM band to 87.7 in areas that are not now serviced by TV channel six. And in areas where Channel six is now in operation, changes could be made after digital TV operation is mandatory in 2009. In many parts of the nation the addition of FM 87.7 and 87.9 would serve many LOCAL AM stations if separation and power levels were calculated carefully. In my area of southwestern Michigan there are few stand alone AM stations. Allowing 87.9 and 87.7 as reserved for use by stand alone AM stations needing translators only at power levels not to exceed an ERP of 200 watts at 100 feet would provide many openings not hindered by high power stations needing vast amounts of co channel separation. Since most radios tune these frequencies anyway the benefit could be immediate. Further downward expansion could be considered when TV 6 is vacated with radio manufactures having no problem retooling to cover the new band as they did for AM expansion many years ago. Beyond the quick fix of adding 87.7 and 87.9, as many as 30 FM channels could be created by the elimination of TV 6.

One commenter used the phrase that allowing AM stations to use FM translators would be the greatest thing since the development of the solid state transmitter. I agree. We could be on the doorstep of the first real move that gives relief to the oldest and in many cases closest to the grass roots broadcasters of this nation. At first glance you would think the large companies like Clear Channel would oppose this NPRM but alas they do not. Even they realize that the time has come to bring AM stand alone stations into the current century. Yes some large FM operations will get more competition from the small stand alones but competition is not something to fear. In many cases the small AM station serving the rural areas will still not have much coverage outside that rural area even with a translator so the major market FM guys will still be safe, while the public in the less populated areas get the benefit of modern broadcasting.

My specific responses to the instant NPRM would include;

No phase in of AM translator grants. Accept all applications and allow natural phasing in to occur. These stations with access to an operating translator will go on instantly while those needing a translator will come on later.

If an AM station mounts its FM antenna on one of **its AM towers**, the 60 dbu/2 millivolt rule should be waived for stations that are directional. The rule could simply be coverage to a maximum of 25 miles in any direction or the 2 millivolt limit in the maximum lobe regardless of the directional pattern. If this is not satisfactory to the station they could opt to move the FM antenna closer to town or anywhere they see fit but the rule would then revert to NO crossing of the 2 millivolt by the 60dbu in any amount. I do not support the actual measurement of the contour in most cases as there is a big difference in summer and winter contours and the M3 average is close enough for this type of calculation. An exception could be made for stations that are directional since these stations should have actual measurements on file from the last full or partial proof or the original application. If actual measurements are used stations would take them in the winter when conductivity is greatest and then find they were exceeding the contour in the summer...when conductivity is at its worst. Is that what the commission envisions?

The number of translators per AM should be limited to 5 as a practical matter. A waiver could be requested for good reason. But I fear allowing ten would lead to trafficking.

Of course AM stations now daytime should be allowed to run the translator all night. That is a no brainer since AM physics should not impede FM coverage beyond basic coverage limits.

And the rules to allow AM stations to use existing translators should be changed a matter of a short ORDER. Allowing AM stations to feed existing translators should not be a matter of controversy it is only a change in modulation source and will have NO technical effect on translator operation.

In closing I applaud the FCC move to address this NPRM

I strongly caution the commission to make sure they are writing the rules to allow true relief to AM stations in most need of relief. Stations at ZERO night power are first in line followed by those with LOW night power and then those that are 24 hour full power but operate as Class C on the local channels that are full of sky wave.

I would oppose the granting of translators for any AM station that operates with at least 10 KW nights. Or the commission should make a provision for a special showing on why stations operating over 10KW night need translator service.

Cliff Davis
Vandalia Michigan